

In the Claims

1. (Currently Amended) A platform assembly that supports a vibration-sensitive payload and configured to be supported by one or more legs, comprising:

a platform having a first surface coupled to a vibration-sensitive payload, a second surface, and an inner core located between and coupled to the first and second surfaces; and

at least one vibration sensor located within said inner core and configured to sense a vibration of a surface of the platform.

2. (Original) The assembly of claim 1, wherein said first surface extends along a first plate and said vibration sensor is attached to said first plate.

3. (Currently Amended) The assembly of claim 1, further comprising an electrical connector attached to an external surface of said platform and coupled to said vibration sensor.

4. (Original) The assembly of claim 1, further comprising a damper located within said inner core.

5. (Original) The assembly of claim 4, wherein said damper includes an active actuator that is coupled to said vibration sensor.

6. (Original) The assembly of claim 5, further comprising a control circuit coupled to said vibration sensor and said active actuator.

7. (Original) The assembly of claim 1, further comprising a monitor coupled to said vibration sensor.

8. (Original) The assembly of claim 1, further comprising a honeycomb core within said inner core.

9. (Original) The assembly of claim 6, wherein said control circuit causes said active actuator to create an active force that emulates an effect of a viscous damper in a frequency domain encompassing a plurality of natural frequencies of a flexural vibration of said first surface.

10. (Cancelled)

11. (Currently Amended) A platform assembly that supports a vibration-sensitive payload and configured to be supported by one or more legs, comprising:

a platform having a first surface coupled to the vibration-sensitive payload, a second surface, and an inner core located between and coupled to the first and second surfaces; and

at least one vibration sensor positioned within the inner core and coupled to at least one of the first surface and the second surface;

a damper positioned within the inner core and coupled to at least one of the first surface and the second surface; and

a control circuit in communication with the vibration sensor and the damper.

~~vibration sensor means for sensing a vibration of said first surface located within said inner core.~~

12. (Currently Amended) The assembly of claim 11, wherein said first surface extends along a first plate and said vibration sensor ~~means~~ includes a vibration sensor attached to said first plate.

13. (Currently Amended) The assembly of claim 11, further comprising an electrical connector attached to an external surface of said table and coupled to said vibration sensor ~~means~~.

14. (Cancelled)

15. (Currently Amended) The assembly of claim ~~14~~11, wherein said damper includes an active actuator that is coupled said vibration sensor ~~means~~.

16. (Original) The assembly of claim 15, further comprising a control circuit coupled to said vibration sensor and said active actuator.

17. (Currently Amended) The assembly of claim 11, further comprising a monitor coupled to said vibration sensor ~~means~~.

18. (Original) The assembly of claim 11, further comprising a honeycomb core within said inner core.

19. (Original) The assembly of claim 16, wherein said control circuit causes said active actuator to create an active force that emulates an effect on a viscous damper in a frequency domain of a flexural vibration of said first surface.

20-25 (Cancelled)

26. (Currently Amended) A platform assembly that supports a vibration-sensitive payload and configured to be supported by one or more legs, comprising:

a platform having a first surface configured to support a vibration-sensitive payload, a second surface, and an inner core located between and coupled to the first and second surfaces;

one or more vibration sensors located within the inner core configured to sense a vibration of a surface of the platform;

a damper located within the inner core configured to apply a force to a surface of the platform; and

a monitor in communication with the one or more sensors and the dampener, the monitor configured to receive vibration information from the one or more sensors and provide an excitation signal to the damper.

27. (Previously Added) The device of claim 26 further comprising a control circuit coupled to the vibration sensor and the active actuator.

28. (Previously Added) The device of claim 27 wherein the damper is configured to apply an active force that emulates an effect of a viscous damper in a frequency domain encompassing a plurality of natural frequencies of a flexural vibration of the first surface in response to the excitation signal from the control circuit in communication with the monitor.

29. (Previously Added) The device of claim 26 further comprising a honeycomb core within said inner core.